





c) transferring control from a first list in memory for scheduling antennae to a second list in memory for scheduling transmitter resources only destined for a given antenna.

10. (Original) The electronic device recited in Claim 9 wherein the method for scheduling the plurality of transmitter resources further comprises the steps of:

d) returning control from the second list for scheduling transmitter resources to the first list for scheduling antenna when the second list is exhausted.

11. (Original) The electronic device recited in Claim 8 wherein the method for scheduling the plurality of transmitter resources comprises the step of:

c) communicating operating information from the computer readable memory only to the transmitter resources that will transmit signals to the given antenna.

12. (Original) The electronic device recited in Claim 8 wherein the operating information stored in the computer readable memory includes context information such as parameter information, timing information, state information, or configuration information.

13. (Original) The electronic device recited in Claim 8 wherein the method for scheduling the plurality of transmitter resources comprises the step of:

c) communicating to a given transmission resource an address of a source having data to be processed by the given transmission resource.

14. (Original) The electronic device recited in Claim 8 wherein the method for scheduling the plurality of transmitter resources comprises the step of:

c) disabling the control information stored in the second list for a given antenna for a channel that will stop transmitting from the given antenna.



a processor coupled to the computer readable memory, the computer readable memory containing instructions and data that, when executed on the processor, implement a method for operating the configurable transmitter resource; and

a configurable modulator coupled to the processor, the configurable modulator including a selective interconnect for selectively providing one of a plurality of data samples for modulating a data signal.

21. (Withdrawn) The configurable transmitter resource recited in Claim 20 wherein the modulator is configurable to modulate data for a plurality of modulations schemes.

22. (Withdrawn) The configurable transmitter resource recited in Claim 20 wherein the plurality of channel format information stored in the slot format table includes any combination of puncturing information, slot size, spreading factor, or identification of a source of data.

23. (Withdrawn) The configurable transmitter resource recited in Claim 20 further comprising:

at least one parameterizeable interface coupled to the local computer readable memory, the parameterizeable interface configurable to any one of the plurality of transmission signal types designated by control information.

24. (Withdrawn) A configurable modulator for processing a data signal, the configurable modulator resource comprising:

a memory having a plurality of shift register taps coupled sequentially, the memory storing a stream of data values;

a selective interconnect coupled to a portion of the plurality of shift register taps that represent a given modulation scheme; and

an input line coupled to a multiplexer, the input line for receiving an instruction that indicates which of the plurality of shift register taps is utilized for a desired modulation protocol.

25. (Withdrawn) The configurable modulator recited in Claim 24 wherein the memory has a first in first out protocol.

26. (Withdrawn) The configurable modulator recited in Claim 24 wherein the memory size is sufficient to store a minimum of two symbols worth of data values for diversity encoding.

27. (Withdrawn) The configurable modulator recited in Claim 24 wherein the memory size is sufficient to store a minimum of two symbols worth of data values for the most intensive modulation scheme slated for the configurable modulator.

28. (Withdrawn) The configurable modulator recited in Claim 24 wherein the modulation schemes implemented by the configurable modulator include any combination of one or more of binary phase shift keying (BPSK), quadrature phase shift keying (QPSK), or 8, 16 or 64 quadrature amplitude modulation (QAM) schemes, or space time transmit diversity (STTD).

29. (Currently amended) In an electronic device having a processor, a computer readable memory, and ~~at least one~~ a plurality of transmitter resource resources each for performing at least one function of a communication protocol coupled to the processor and a computer readable memory, a method of scheduling the transmitter resources for a desired channel of the communication protocol, the method comprising the steps of:

- a) providing an enabling signal from the computer readable memory to select only one of the plurality of the transmitter resource resources for driving a given antenna; and
- b) ~~transmitting~~ providing operating information to operate only the transmitter resource driving a the given antenna.

30. (Original) The electronic device recited in Claim 29 wherein the method for scheduling the transmitter resources further comprises the step of:

- c) transferring control from a first list in memory for scheduling antennae to a second list in memory for scheduling transmitter resources only destined for a given antenna.

31. (Currently amended) The electronic device recited in Claim 30 wherein the method for scheduling the transmitter resources further comprises the step of:

- d) returning control from the second list for scheduling transmitter resources to the first list for scheduling ~~antenna~~ antennae when the second list is exhausted.

32. (Currently amended) The electronic device recited in Claim ~~30~~ 31 wherein the method for scheduling the transmitter resources further comprises the step of:

- e) repeating steps a) through d) in a serial manner for a plurality of antennae.

33. (Original) The electronic device recited in Claim 29 wherein the method for scheduling the transmitter resources further comprises the step of:

- c) disabling the operating information stored in the memory for a channel that desires to stop transmitting from a given antenna.

34. (Original) The electronic device recited in Claim 29 wherein the method for scheduling the transmitter resources further comprises the step of:

